

## **§ 57.12048**

of the Mine Safety and Health Administration.

[53 FR 32526, Aug. 25, 1988, as amended at 60 FR 35695, July 11, 1995]

### **§ 57.12048 Communication conductors on power poles.**

Telegraph, telephone, or signal wires shall not be installed on the same crossarm with power conductors. When carried on poles supporting powerlines, they shall be installed as specified by the National Electrical Code.

### **§ 57.12050 Installation of trolley wires.**

Trolley wires shall be installed at least seven feet above rails where height permits, and aligned and supported to suitably control sway and sag.

### **§ 57.12053 Circuits powered from trolley wires.**

Ground wires for lighting circuits powered from trolley wires shall be connected securely to the ground return circuit.

#### **SURFACE ONLY**

### **§ 57.12065 Short circuit and lightning protection.**

Powerlines, including trolley wires, and telephone circuits shall be protected against short circuits and lightning.

### **§ 57.12066 Guarding trolley wires and bare powerlines.**

Where metallic tools or equipment can come in contact with trolley wires or bare powerlines, the lines shall be guarded or deenergized.

### **§ 57.12067 Installation of transformers.**

Transformers shall be totally enclosed, or shall be placed at least 8 feet above the ground, or installed in a transformer house, or surrounded by a substantial fence at least 6 feet high and at least 3 feet from any energized parts, casings, or wiring.

### **§ 57.12068 Locking transformer enclosures.**

Transformer enclosures shall be kept locked against unauthorized entry.

## **30 CFR Ch. I (7–1–00 Edition)**

### **§ 57.12069 Lightning protection for telephone wires and ungrounded conductors.**

Each ungrounded conductor or telephone wire that leads underground and is directly exposed to lightning shall be equipped with suitable lightning arrestors of approved type within 100 feet of the point where the circuit enters the mine. Lightning arrestors shall be connected to a low resistance grounding medium on the surface and shall be separated from neutral grounds by a distance of not less than 25 feet.

### **§ 57.12071 Movement or operation of equipment near high-voltage powerlines.**

When equipment must be moved or operated near energized high-voltage powerlines (other than trolley lines) and the clearance is less than 10 feet, the lines shall be deenergized or other precautionary measures shall be taken.

#### **UNDERGROUND ONLY**

### **§ 57.12080 Bare conductor guards.**

Trolley wires and bare power conductors shall be guarded at mantrip loading and unloading points, and at shaft stations. Where such trolley wires and bare power conductors are less than 7 feet above the rail, they shall be guarded at all points where persons work or pass regularly beneath.

### **§ 57.12081 Bonding metal pipelines to ground return circuits.**

All metal pipelines, 1,000 feet or more in length running parallel to trolley tracks, that are used as a ground return circuit shall be bonded to the return circuit rail at the ends of the pipeline and at intervals not to exceed 500 feet.

### **§ 57.12082 Isolation of powerlines.**

Powerlines shall be well separated or insulated from waterlines, telephone lines and air lines.

### **§ 57.12083 Support of power cables in shafts and boreholes.**

Power cables in shafts and boreholes shall be fastened securely in such a manner as to prevent undue strain on the sheath, insulation, or conductors.